



# WEATHER

## 1999 WEATHER AND CROP SUMMARY

### JANUARY - MARCH

Sever thunderstorms and tornadoes ripped through parts of Middle and West Tennessee during mid-January. Especially hard hit was the counties of Madison and Montgomery. Strong winds and heavy rains from these storms caused structural damage to some farms, and flooded low lying wheat fields. Despite the isolated damage, the wheat crop was rated in mostly good condition at the end of January. The unseasonably warm temperatures the State experienced during January remained in place up until the middle of February, when they finally returned to normal. Wheat continued to be rated in mostly good condition throughout February, and producers had begun top-dressing and spraying herbicides on their fields by the end of the month. Temperatures during March were much colder than normal, and some areas reported that wheat growth had been hindered. Despite the lack of growth during March, overall crop conditions remained fairly good. Producers continued top-dressing and spraying herbicides on wheat fields in between showers. No major insect or disease problems was reported during this time. By month's end, cotton and corn producers were busy preparing fields for planting. The State's cattle herd held up well during the winter months, and most areas reported adequate hay supplies.

### APRIL

Wet field conditions during the first part of April delayed the start of corn planting, but as fields dried out farmers quickly made up for lost time. By the end of the month, planting was about a week ahead of normal with 80 percent complete. Most of the 20 percent that remained would be planted for silage. During this time, growers reported that excess moisture and cool temperatures were delaying corn emergence. Wheat continued to look good with no widespread disease problems reported. In between April showers, farmers were busy fertilizing, spreading lime, and spraying herbicides on pastures. Tobacco plant growers were preparing plants for transplanting which had begun in some counties on a very limited basis. Despite a few nights of below freezing temperatures, fruit growers reported that the State had the best fruit set conditions they had seen in several years. By the end of the month, some cotton growers had begun to plant, but most were waiting for warmer soil temperatures and drier conditions. Two percent of the full-season soybeans had been planted by this time.

### MAY

During May, farmers across the State were busy planting crops and harvesting the first cutting of hay. Corn planting was virtually complete by the first of the month, but cool night time temperatures and wet conditions continued to hamper development. Conditions soon improved as warmer temperatures moved into the State. As a result, corn was rated in mostly good to excellent condition by the end May. The State's cotton growers battled soggy field conditions early on, but were able to make up for lost time as drier conditions prevailed. Growers made excellent progress during the second week of the month and planted nearly a

third of the acreage during this time. Planting was complete by month's end, and most counties reported the crop was in good to excellent condition despite an increase in insect pressure in some areas. Wheat continued to thrive throughout the State with disease and insect pressure light. By the end of May, tobacco growers had transplanted 70 percent of the tobacco crop compared to just 49 percent at this same time a year earlier. This was nearly a week ahead of the five-year average. Some burley fields were showing signs of stress due to a lack of moisture, but dark tobacco was reported to be in good condition and off to a good start. Hay producers were harvesting their fields as weather permitted. Alfalfa growers had harvested 90 percent of their acreage by the end of May, while 72 percent of all other hay had been harvested. Forty-seven percent of the soybeans had been planted by month's end, nearly 10 days ahead of normal. Pastures were in mostly fair to good condition.

### JUNE

By the beginning of June, dry weather had begun to take a toll on both crops and pastures. Farmers reported problems such as corn twisting and poor germination in newly planted soybeans. Pastures were becoming thin, and some cattle producers were considering feeding hay or liquidating part of their herd. Despite the lack of rain, the majority of the crops remained in good to fair condition thanks to cooler than normal temperatures. Wheat growers took advantage of the dry conditions and harvested their crop at a rapid pace. Harvest was virtually finished by the end of June, almost two weeks ahead of the five-year average. Producers were very pleased with overall yields and test weights of the crop. Tobacco transplanting was completed by the end of the month. Many areas reported problems with Tomato Spotted Wilt Virus and Black Shank. A few isolated areas even reported outbreaks of Blue Mold. Rain was now becoming critical to the corn crop, which was moving into it's pollination stage. Insect pressure was starting to increase in cotton and many acres were being treated. Rain finally arrived by the end of June bringing much needed relief. Soybean growers who had earlier parked their planters due to dry soil conditions made excellent progress and by the end of June had only 4 percent of the acreage left to plant. Cotton growth had slowed somewhat from the rapid pace seen earlier in the growing season, but crop development was still nearly a week ahead of the five year average. Insects continued to pressure the crop, but boll-weevil eradication insecticide applications provided some relief. The first cutting of hay had been completed by this time.

### JULY

Crop conditions continued to improve during the first part of July, with all crops rated in mostly good condition. Due to localized heavy rains, numerous locations reported that low lying tobacco fields were showing signs of stress due to waterlogged fields. Isolated outbreaks of Blue Mold

continued to be reported. By July 4, virtually all of the State's cotton crop had reached the squaring stage and producers were busing making insecticide applications. Some areas outside the regional eradication area reported heavy boll weevil pressure and producers were spraying on a 3 to 5 day schedule. Growers in the Southwestern part of the State received help with aphid control during the second weekend of the month when a front moved in and brought with it the fungus *Neozygites fresenii*; a naturally occurring fungus that attacks the aphids. Soybeans growers continued reporting grasshopper problems in some no-till soybeans and corrective action was being taken. The corn crop which was now in its critical pollination stage took full advantage of the earlier rain and development was about 4 days ahead of normal. By mid-July, tobacco growers were spraying for insects and topping early set tobacco. Diseases such as Black Shank and brown leaf spot were becoming more prevalent. Sunny conditions helped dry out waterlogged tobacco fields and soybean producers were spraying post emergent herbicides on their double crop soybeans. Unfortunately, the hot and dry conditions returned during the latter part of July and crop conditions began to deteriorate. High temperatures and lack of moisture caused adverse effects on pollination in late planted corn and hampered the growth of the State's double crop soybeans. Many tobacco growers were forced to irrigate their crop, and some cotton was shedding small bolls and squares. Despite the dry conditions, most crops were still rated in good to fair condition but this would not last.

## AUGUST

Weather across Tennessee during August remained mostly hot and dry, with only widely scattered showers and thunderstorms. Late planted corn was curling, tobacco was being irrigated, and many cattle producers were feeding hay or selling off animals due to deteriorating pastures. Cotton was shedding fruit and young soybeans were well below their normal size. Corn silage harvest was in full swing, but some farmers missed the proper harvesting stage due to the rapid drying down of the crop. By mid-August, crop conditions were surprisingly rated in mostly fair to good condition despite the lack of rain. Overall cotton conditions actually improved during this time due to isolated showers in some counties. Farmers were busy spraying insecticides on cotton, harvesting tobacco, and cutting hay. Yields on the second cutting of hay were very disappointing and some farmers had decided to pasture their hay fields because the grass was too short to cut for hay. Corn harvest had begun on a very limited basis and early yields looked fairly good. The remainder of the month stayed hot and dry with soybeans and pastures hit the hardest. Nearly half of the soybean crop was rated poor to very poor, and plants were struggling to set and fill pods due to the lack of moisture. Many areas reported plants with flat, unfilled or little to no pods set. Corn harvest was in high gear by the end of August, and running about 10 days ahead of the 5-year average. Despite earlier improvements, the dry conditions were now taking a toll on the cotton crop.

## SEPTEMBER

Drought conditions carried over into the month of September and crops continued to suffer across the Volunteer State. On September 1, the State's soybean crop had the worst condition rating since records began in 1985 with most of the acreage rated in poor to very poor condition. Producers were concerned that many double cropped beans had little or no chance to recover, even with normal rainfall the rest of the year. Many producers now had to decide if it was economically feasible to harvest them for beans or simply abandon them. Some growers had already started to cut poor fields for hay. Pastures were even worse than soybeans. Lack of adequate grazing and water caused many animals to show signs of stress, farmers continued feeding hay and hauling water to their herds. By September 10, farmers were depleting their hay stocks, and only 56 percent of the counties reported having adequate hay supplies. Some farmers were baling corn and sorghum stalks for hay.

Tobacco harvest continued, and by the end of the month 92% of the burley and dark fire-cured had been harvested. This was nearly two weeks ahead of normal. Cotton growers were busy defoliating and harvesting their crop with disappointing initial yields. Corn harvest was virtually complete by the end of September, nearly a month ahead of normal. Weather conditions remained mostly dry through September, but some areas did receive rain on the 19<sup>th</sup> and 20<sup>th</sup>. Some early beans were being harvested near the end of the month and yields were highly variable depending on when the fields received rain. The lack of moisture was delaying winter wheat seeding and the over seeding of pastures.

## OCTOBER

Rain finally arrived during the first part of October, the first significant rainfall some areas had seen in several months. Even though the rain came too late for most of the State's major row crops, it was very beneficial for newly seeded winter wheat fields and pastures. Wheat seeding continued to lag behind the five-year average, but growers quickly made up for lost time once the fields dried out. With tobacco complete, growers were now concentrating their efforts on preparing their crop for market. The rainfall helped with curing which had been struggling in the hot, dry conditions. Poor cotton yields had caused many growers to abandon their second picking and many were chopping the stalks as soon as the picker was run through the field. As a result, harvest was nearly complete by the end of October. This was nearly a month ahead of the five-year average. Soybean harvest continued at a feverish pace and only 25 percent of the acreage was left to be harvested by October 31. Pastures finally showed improvement, but more rain was needed to fill ponds and creeks that had been depleted during the drought. Many farmers were restructuring these farm ponds due to their low water levels. Farmers were also busy renovating pastures and trying to get one last cutting of hay before cold weather moved in.

## NOVEMBER - DECEMBER

Rain showers continued to bring much needed rainfall to the State during November. Rain helped replenish soil moisture, as well as help winter wheat and pastures. Grass responded well to the moisture, but was still very short in length. Cattle were rated in mostly fair to good condition. Even though the rain was beneficial, it did not last long enough to keep tobacco in case very long and stripping continued to be delayed. Soybean growers finished harvesting their crop and closed the book on a very disappointing year. Wheat seeding was also complete by the end of the month, and the crop was rated in mostly good condition. Cattle producers continued to feed hay and purchase additional supplies to last throughout the winter. Weather conditions across the State during the month of December were very mild. Except for a short cold snap during the latter part of the month, temperatures averaged above normal. Rainfall on the other hand, averaged below normal. Wheat continued to be rated in good condition, and farmers were finding very few aphids. Livestock producers continued to be concerned over the availability of hay.

# COTTON CROP PROGRESS

COTTON: PERCENTAGE OF ACREAGE PLANTED, 1990-1999

Year	April			May			June	
	10	20	30	10	20	30	10	20
1990	0	0	4	18	63	84	95	100
1991	0	2	5	13	27	47	87	99
1992	0	3	26	71	90	97	100	100
1993	0	0	6	25	70	94	100	100
1994	0	3	13	54	91	99	100	100
1995	2	9	16	41	84	97	100	100
1996	0	0	9	53	82	98	100	100
1997	0	2	4	48	93	100	100	100
1998	0	0	5	17	68	97	100	100
1999	0	5	12	38	88	99	100	100

5 yr avg    0    3    10    43    84    98    100    100

PERCENTAGE OF ACREAGE SETTING BOLLS, 1990-1999

June		July			Aug.		
20	30	10	20	30	10	20	30
0	0	6	27	68	89	94	100
0	1	10	33	59	91	96	100
0	1	13	33	66	98	100	100
0	1	11	53	93	100	100	100
0	6	19	60	94	100	100	100
0	4	22	63	90	99	100	100
0	6	33	81	98	100	100	100
0	0	2	31	75	93	100	100
1	14	30	65	91	99	100	100
0	8	40	69	92	99	100	100

0    6    21    60    90    98    100    100

COTTON: PERCENTAGE OF ACREAGE WITH OPEN BOLLS, 1990-

Year	August			September			October	
	10	20	30	10	20	30	10	20
1990	3	4	17	49	73	88	94	100
1991	0	6	22	47	69	84	93	99
1992	1	3	8	15	59	77	94	99
1993	1	5	30	67	87	98	100	100
1994	0	2	19	60	90	97	100	100
1995	0	3	23	55	86	96	100	100
1996	0	10	31	64	90	99	100	100
1997	0	0	2	25	65	85	95	99
1998	2	9	25	65	92	99	100	100
1999	1	13	54	86	94	100	100	100

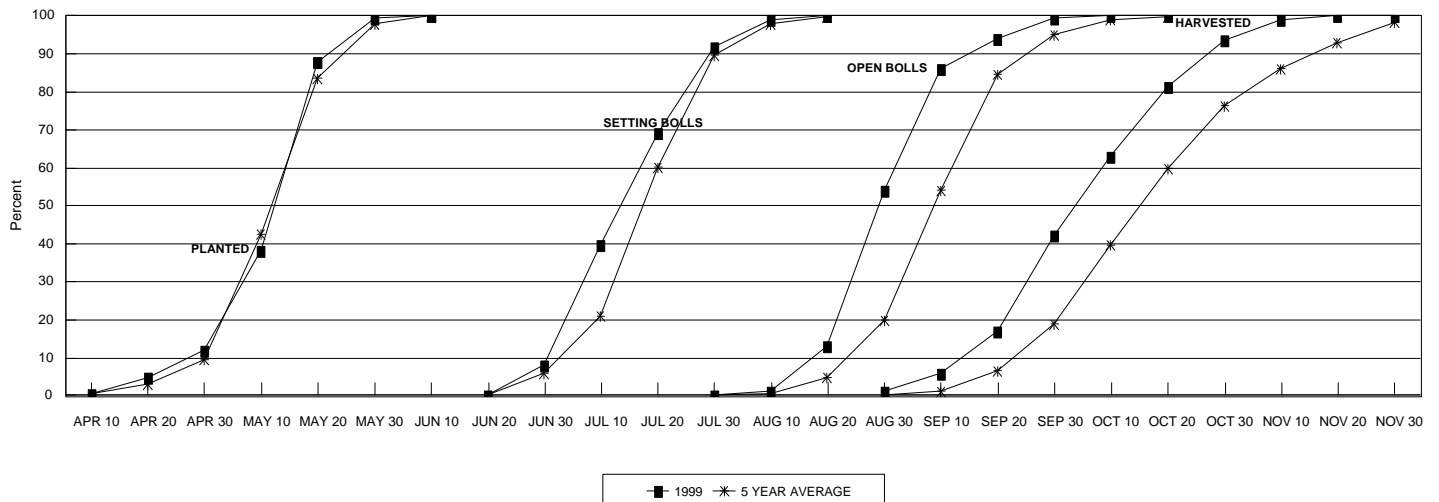
5 yr avg    1    5    20    54    85    95    99    100

PERCENTAGE OF ACREAGE HARVESTED, 1990-1999

September			October			November		
10	20	30	10	20	30	10	20	30
0	0	22	40	60	73	85	91	96
0	5	22	50	68	77	87	93	97
0	1	3	18	43	63	74	89	94
0	6	19	42	59	81	90	94	99
1	6	18	39	52	67	84	93	99
0	4	12	28	53	74	83	91	98
2	9	28	51	71	79	87	94	97
0	0	7	23	46	71	81	88	97
3	14	29	57	76	90	95	99	100
6	17	42	63	82	94	99	100	100

1    7    19    40    60    76    86    93    98

# COTTON CROP PROGRESS



# CORN CROP PROGRESS

CORN: PERCENTAGE OF ACREAGE PLANTED, 1990-1999

Year	April				May			June	
	1	10	20	30	10	20	30	10	20
1990	1	4	8	26	45	69	84	95	100
1991	2	5	11	28	44	58	68	84	98
1992	0	9	49	73	87	95	98	100	100
1993	0	0	9	49	72	88	97	100	100
1994	2	4	15	53	77	88	96	100	100
1995	18	47	71	86	92	97	100	100	100
1996	0	13	49	74	85	94	98	100	100
1997	7	29	52	72	85	95	100	100	100
1998	9	30	51	65	74	89	100	100	100
1999	0	11	51	79	94	97	100	100	100

PERCENTAGE OF ACREAGE TASSELED, 1990-1999

	May	June			July			Aug.
	30	10	20	30	10	20	30	10
1990	1	2	5	17	38	59	78	97
1991	0	3	12	33	58	72	80	97
1992	0	2	11	39	70	90	98	100
1993	0	0	4	17	51	82	95	99
1994	0	1	11	33	64	82	94	100
1995	1	10	32	64	83	92	99	100
1996	0	0	13	63	84	93	100	100
1997	0	0	3	23	66	86	94	100
1998	0	1	21	59	75	90	99	100
1999	0	2	21	55	83	93	100	100

5 yr avg    7    25    48    70    83    93    99    100    100    0    2    16    49    74    89    97    100

CORN: PERCENTAGE OF ACREAGE DENT STAGE, 1990-1999

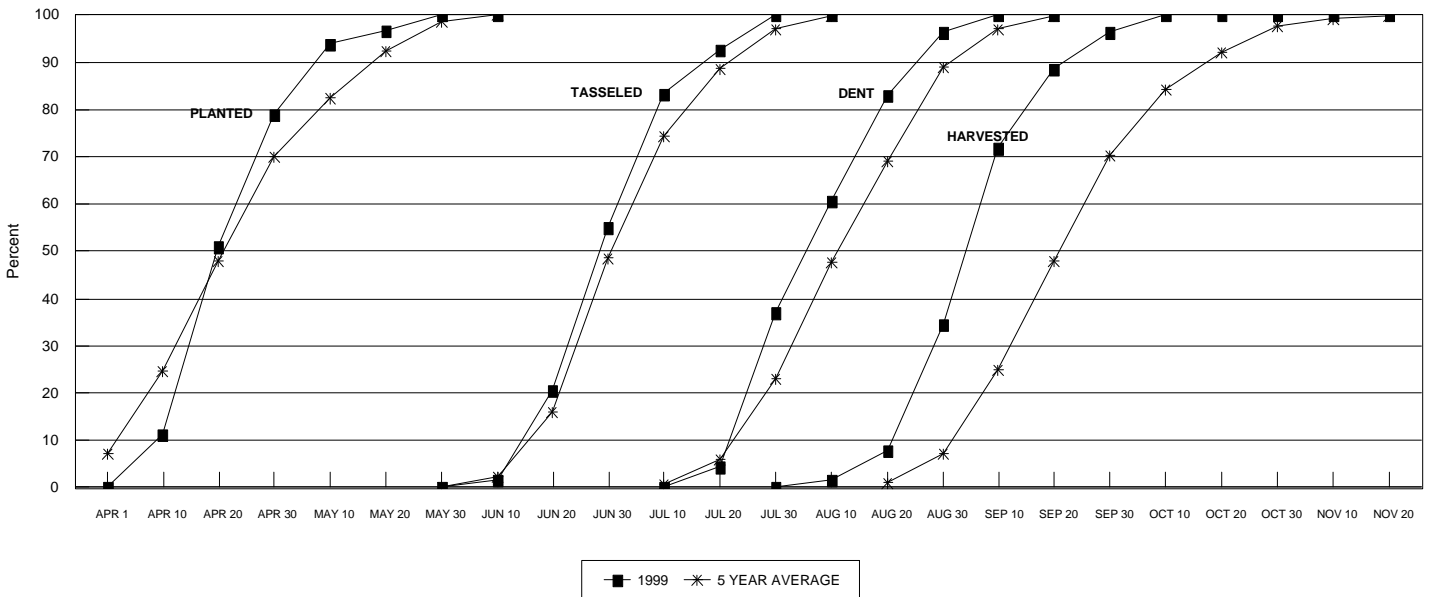
Year	July			August			September	
	10	20	30	10	20	30	10	20
1990	0	2	10	25	45	69	83	88
1991	2	10	20	42	54	76	87	94
1992	2	8	17	40	61	88	95	99
1993	0	1	9	25	53	82	95	99
1994	2	7	20	42	55	80	92	99
1995	2	10	28	55	76	92	99	100
1996	0	5	26	49	77	92	99	100
1997	0	3	15	41	62	88	97	100
1998	0	6	26	52	74	92	99	100
1999	0	5	37	61	83	97	100	100

PERCENTAGE OF ACREAGE HARVESTED FOR GRAIN, 1990-1999

	August		September			October			November	
	20	30	10	20	30	10	20	30	10	20
1990	0	2	7	19	39	54	71	81	87	92
1991	0	5	14	31	50	68	81	88	92	94
1992	0	3	6	23	42	61	78	86	92	96
1993	0	2	9	24	44	68	80	90	94	98
1994	0	2	10	32	53	70	81	91	96	99
1995	1	13	34	64	84	91	95	100	100	100
1996	1	6	24	38	69	84	93	99	100	100
1997	0	1	12	37	62	82	91	99	100	100
1998	3	15	45	70	85	95	100	100	100	100
1999	8	35	72	89	96	100	100	100	100	100

5 yr avg    1    6    23    48    69    89    97    100    1    7    25    48    70    84    92    98    99    100

# CORN PROGRESS



# SOYBEAN CROP PROGRESS

SOYBEANS: PERCENTAGE OF ACREAGE PLANTED, 1990-1999

Year	April	May				June			July	
	30	10	20	30	10	20	30	10	20	
1990	0	1	4	14	39	66	86	98	100	
1991	0	1	2	6	25	55	78	93	99	
1992	2	8	22	44	62	70	90	99	100	
1993	0	1	8	25	57	79	90	97	100	
1994	0	4	13	36	55	77	93	99	100	
1995	1	5	13	30	45	67	90	97	100	
1996	1	4	16	31	41	53	79	95	100	
1997	0	4	18	31	40	49	66	91	99	
1998	0	3	14	31	53	75	88	96	100	
1999	3	8	22	50	73	87	96	100	100	
5 yr avg	0	4	15	32	47	64	83	95	100	

PERCENTAGE OF ACREAGE SETTING PODS, 1990-1999

July			August			September	
10	20	30	10	20	30	10	20
1	2	9	25	45	65	88	95
1	2	6	16	36	61	87	96
0	6	11	41	58	83	93	99
0	2	10	33	60	80	95	99
0	5	20	39	48	69	91	100
0	5	22	43	64	88	98	100
0	6	18	37	57	80	96	100
0	2	13	30	49	72	89	97
0	9	23	43	63	81	96	100
5	18	36	53	72	87	98	100
0	5	19	38	56	78	94	99

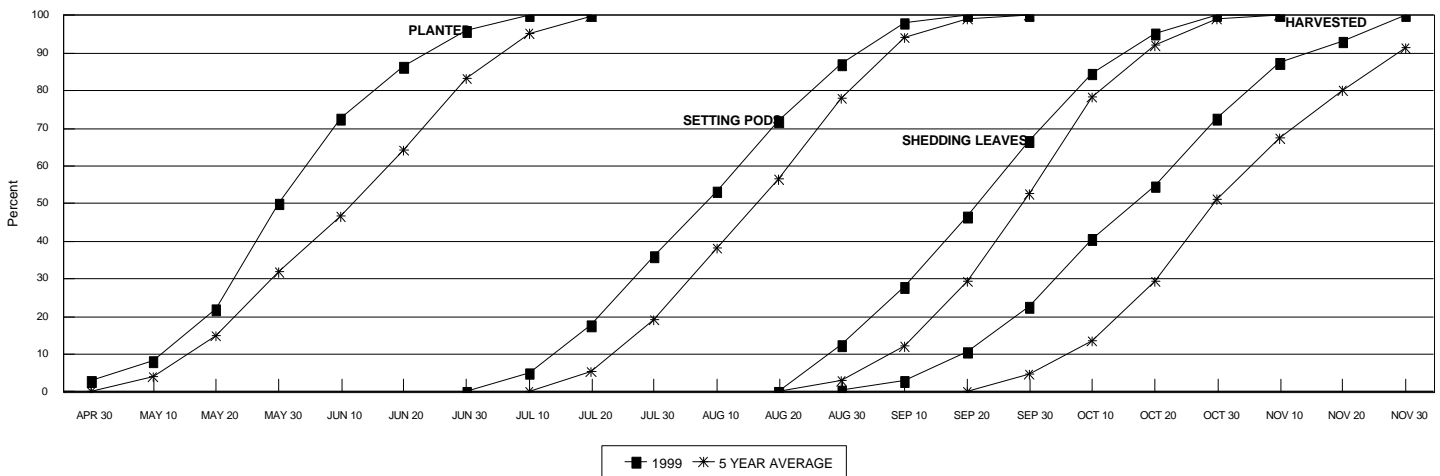
SOYBEANS: PERCENTAGE OF ACREAGE SHEDDING LEAVES, 1990-1999

Year	August		September			October			Nov
	20	30	10	20	30	10	20	30	10
1990	0	0	13	24	36	56	78	95	100
1991	0	1	8	17	33	71	86	96	100
1992	0	3	7	22	36	61	86	96	100
1993	0	3	10	27	45	75	91	98	100
1994	0	5	11	25	46	73	88	99	100
1995	1	6	15	37	58	81	94	100	100
1996	0	2	10	27	49	77	91	99	100
1997	0	0	6	21	44	72	90	99	100
1998	0	3	19	36	67	89	97	100	100
1999	0	13	28	47	67	85	95	100	100
5 yr avg	0	3	12	29	53	78	92	99	100

PERCENTAGE OF ACREAGE HARVESTED, 1990-1999

September		October			November		
20	30	10	20	30	10	20	30
0	3	6	15	30	66	82	94
0	2	7	22	41	67	87	97
0	2	8	21	42	62	80	90
0	3	11	22	45	66	86	93
1	5	13	23	45	68	86	95
0	3	11	30	57	71	81	92
0	2	6	17	28	45	64	78
0	4	13	31	51	62	74	91
0	9	25	47	75	91	95	100
11	23	41	55	73	88	93	100
0	5	14	30	51	67	80	91

# SOYBEAN PROGRESS



# TOBACCO CROP PROGRESS

TOBACCO: PERCENTAGE OF ACREAGE OF PLANTS UP, 1990-

Year	April				May	
	1	10	20	30	10	20
1990	35	59	86	94	99	100
1991	30	57	80	94	100	100
1992	32	64	87	98	100	100
1993	17	40	70	93	97	100
1994	23	47	70	93	99	100
1995	35	62	89	97	100	100
1996	28	47	69	90	100	100
1997	44	72	87	96	100	100
1998	42	69	84	95	100	100
1999	42	59	79	95	100	100
5 yr avg	34	59	80	94	100	100

PERCENTAGE OF ACREAGE TRANSPLANTED, 1990-1999

Year	April	May				June		
	30	10	20	30	10	20	30	
1990	2	10	31	62	88	97	100	
1991	3	13	36	55	83	94	99	
1992	5	17	48	73	88	96	100	
1993	1	9	27	61	87	96	100	
1994	2	12	41	71	92	97	100	
1995	6	18	36	61	80	92	98	
1996	3	13	34	57	78	88	97	
1997	1	13	33	46	58	69	86	
1998	2	6	28	48	64	79	92	
1999	3	14	39	69	88	97	100	
5 yr avg	3	12	34	57	74	85	95	

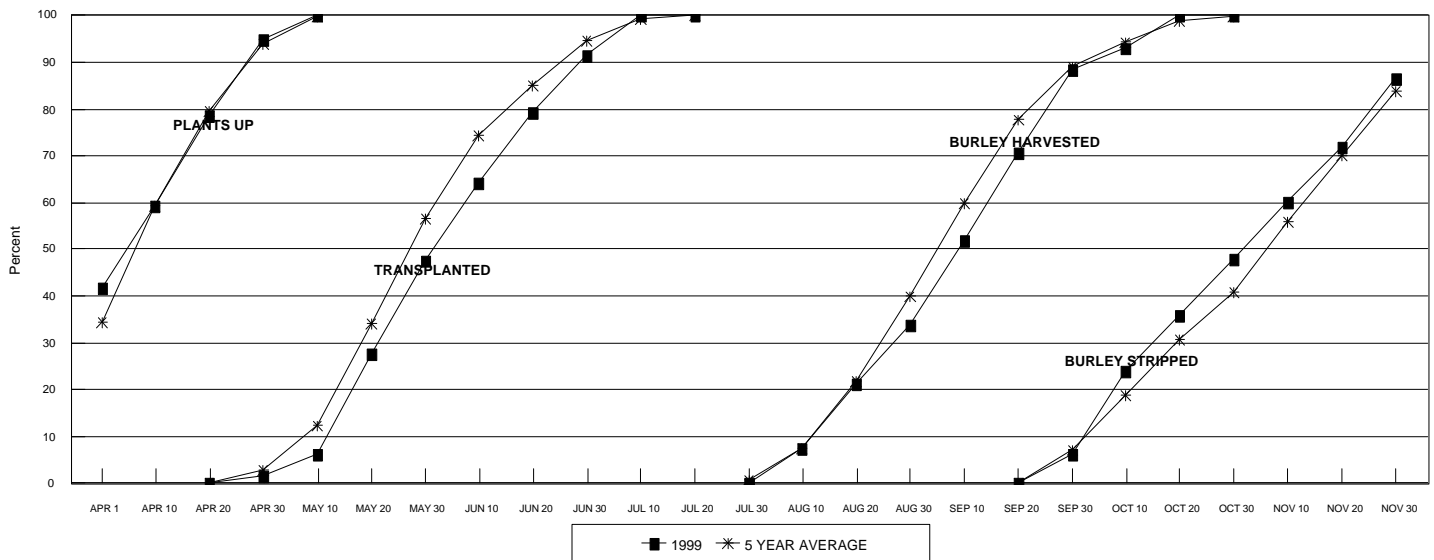
BURLEY: PERCENTAGE OF ACREAGE HARVESTED, 1990-1999

Year	July	August				September			October
	30	10	20	30	10	20	30	10	
1990	1	4	16	35	65	81	93	97	
1991	4	13	28	50	75	86	93	98	
1992	2	10	23	46	66	83	93	98	
1993	0	4	16	31	56	73	89	96	
1994	2	9	20	45	66	85	94	98	
1995	2	9	27	45	65	81	91	96	
1996	0	6	20	41	63	81	90	96	
1997	0	7	21	36	53	71	81	89	
1998	0	8	21	34	52	71	88	93	
1999	0	17	35	54	76	88	93	98	
5 yr avg	1	8	22	40	60	78	89	94	

BURLEY: PERCENTAGE OF CROP STRIPPED, 1990-1999

Year	Sept.	October				November		
	30	10	20	30	10	20	30	
1990	2	17	28	43	58	75	95	
1991	6	20	34	43	54	68	88	
1992	3	13	23	36	57	72	91	
1993	3	11	24	38	51	69	88	
1994	7	17	32	43	59	73	83	
1995	11	21	33	45	59	74	87	
1996	8	18	28	38	53	71	89	
1997	4	13	24	31	49	61	75	
1998	6	24	36	48	60	72	87	
1999	9	18	29	40	58	64	82	
5 yr avg	7	19	31	41	56	70	84	

# TOBACCO CROP PROGRESS





## TENNESSEE FIRST FREEZE DATES

Data taken from National Weather Service offices, Cooperative Observers, and University of Tennessee Experiment Stations through the years have provided the following table. The table lists the chance of occurrence, or probability, that a freeze will occur by a certain date. For example, at Bolivar there is a 10 percent chance (1 in 10) that a freeze will occur on or before October 9 ... a 50 percent chance that it will occur by the 24th ... and a 90 percent chance by November 8. Also, the historical first fall freeze date has been provided by the University of Tennessee.

### TENNESSEE FALL FREEZE DATES AT SELECTED PROBABILITY LEVELS

DISTRICT/STATION	FIRST	10 PERCENT	50 PERCENT	90 PERCENT
<b>WEST TENNESSEE</b>				
AMES	10/02	10/05	10/20	11/04
BOLIVAR		10/09	10/24	11/08
BROWNSVILLE		10/16	10/29	11/11
COVINGTON	10/07	10/17	10/30	11/13
DYERSBURG	10/14	10/23	11/04	11/16
JACKSON EXP STN	09/30	10/15	10/28	11/11
JACKSON AIRPORT	10/04	10/16	10/29	11/11
MARTIN	10/04	10/13	10/25	11/07
MEMPHIS AIRPORT	10/16	10/25	11/07	11/20
MILAN	10/02	10/10	10/23	11/04
NEWBERN		10/10	10/24	11/08
PARIS	10/03	10/09	10/22	11/05
SAMBURG WLD REFUGE		10/14	10/25	11/05
UNION CITY	10/03	10/06	10/20	11/02
<b>MIDDLE TENNESSEE</b>				
CLARKSVILLE		10/08	10/22	11/05
COLUMBIA		10/05	10/20	11/04
DICKSON		10/08	10/22	11/06
DOVER		10/04	10/14	10/25
FRANKLIN		10/07	10/21	11/04
LEWISBURG	09/30	10/07	10/20	11/02
MURFREESBORO		10/09	10/22	11/04
NASHVILLE	10/02	10/13	10/29	11/11
SAVANNAH		10/12	10/25	11/07
SHELBYVILLE		10/06	10/21	11/05
SPRINGFIELD	10/03	10/07	10/19	11/01
SPRING HILL	10/02	10/02	10/20	11/06
WAYNESBORO		09/28	10/11	10/23
<b>CUMBERLAND PLATEAU</b>				
ALLARDT		10/03	10/16	10/29
CELINA		10/05	10/20	11/03
CROSSVILLE EXP STN	09/30	10/01	10/15	10/29
CROSSVILLE AIRPORT	10/02	10/04	10/19	11/02
MCMINNVILLE		10/08	10/23	11/07
MONTEAGLE		10/15	10/29	11/11
TULLAHOMA		10/08	10/21	11/04
<b>EAST TENNESSEE</b>				
BRISTOL	10/02	10/11	10/24	11/06
CHATTANOOGA	10/18	10/20	11/01	11/13
COPPERHILL		10/06	10/18	10/30
GATLINBURG		10/03	10/15	10/26
GREENEVILLE	10/03	10/08	10/20	10/31
KINGSPORT		10/07	10/20	11/02
KNOXVILLE UT		10/10	10/25	11/09
KNOXVILLE AIRPORT		10/23	11/04	11/17
LENOIR CITY		10/14	10/27	11/09
NEWPORT		10/09	10/21	11/03
OAK RIDGE		10/14	10/27	11/10
ROGERSVILLE		10/04	10/17	10/31

Source: National Weather Service, Cooperative Observers, and the University of Tennessee Experiment Stations.

## TENNESSEE LAST FREEZE DATES

Data taken from National Weather Service offices, Cooperative Observers, and University of Tennessee Experiment Stations through the years have provided the following table. The table lists the chance of occurrence, or probability, that a freeze will occur after a certain date. For example, at Bolivar there is a 90 percent chance (9 in 10) that the last freeze will occur after March 25 ... a 50 percent chance that it will occur after April 6 ... and a 10 percent chance after the 17th.

### TENNESSEE SPRING FREEZE DATES AT SELECTED PROBABILITY LEVELS

DISTRICT/STATION	90 PERCENT	50 PERCENT	10 PERCENT
<b>WEST TENNESSEE</b>			
BOLIVAR	3/25	4/06	4/17
BROWNSVILLE	3/19	4/01	4/14
COVINGTON	3/16	3/31	4/14
DYERSBURG	3/09	3/26	4/12
JACKSON EXP STN	3/25	4/06	4/18
JACKSON AIRPORT	3/23	4/03	4/15
MARTIN EXP STN	3/24	4/07	4/21
MEMPHIS AIRPORT	3/08	3/23	4/08
MILAN	3/24	4/05	4/16
NEWBERN	3/20	4/01	4/12
PARIS	3/28	4/11	4/24
SAMBURG WLD REFUGE	3/23	4/04	4/16
UNION CITY	3/23	4/06	4/20
<b>MIDDLE TENNESSEE</b>			
CLARKSVILLE	3/29	4/12	4/27
COLUMBIA	3/25	4/08	4/23
DICKSON	3/27	4/09	4/22
DOVER	4/04	4/22	5/10
FRANKLIN	3/29	4/14	4/29
LEWISBURG EXP STN	3/30	4/15	5/01
MURFREESBORO	3/27	4/10	4/23
NASHVILLE AIRPORT	3/24	4/05	4/16
SAVANNAH	3/27	4/09	4/22
SHELBYVILLE	3/30	4/15	4/30
SPRINGFIELD	3/27	4/10	4/24
WAYNESBORO	4/11	4/27	5/13
<b>CUMBERLAND PLATEAU</b>			
ALLARDT	4/03	4/22	5/11
CELINA	4/07	4/20	5/02
CROSSVILLE EXP STN	4/04	4/26	5/17
MCMINNVILLE	3/27	4/11	4/26
MONTEAGLE	3/26	4/11	4/27
TULLAHOMA	3/28	4/09	4/21
<b>EAST TENNESSEE</b>			
BRISTOL	4/04	4/17	4/30
CHATTANOOGA	3/23	4/05	4/18
COPPERHILL	4/03	4/21	5/10
GATLINBURG	4/18	5/01	5/13
GREENEVILLE EXP STN	4/09	4/23	5/08
KINGSPORT	4/03	4/16	4/29
KNOXVILLE UT	4/02	4/16	4/30
LENOIR CITY	3/31	4/13	4/25
NEWPORT	4/02	4/17	5/01
OAK RIDGE	3/28	4/11	4/26
ROGERSVILLE	4/06	4/22	5/07



# CROPS: USUAL PLANTING AND HARVESTING DATES, TENNESSEE

Crop	1999 Harvested Acreage	Usual Planting Dates	Usual Harvesting Dates			Principal Producing Agricultural Statistics Districts*
			Begin	Most Active	End	
Corn:						
Grain	570,000	Apr. 5-June 1	Sep. 1	Sep. 20-Oct. 15	Nov.	statewide
Silage	55,000	Apr. 15-June 10	Aug. 10	Aug. 25-Sep. 20	Oct. 10	statewide
Cotton	565,000	Apr. 25-June 5	Sep. 20	Oct. 5-Nov. 1	Nov.	10, 20
Hay	1,880,000		May 1		Oct. 1	statewide
Sorghum:						
Grain	18,000	Apr. 15-June 25	Sep. 1	Sep. 15-Oct. 10	Nov. 1	10,20,30,40
Silage	1,000	Apr. 25-June 25	Aug. 20	Sep. 1-Sep. 30	Oct. 15	10,20,30,40
Soybeans	1,190,000	May 10-July 10	Oct. 5	Oct. 20-Nov. 15	Dec. 5	10,20,30,40
Tobacco:						
Eastern						
Dark-Fired (22)	7,000	May 5-June 20	Aug. 10	Aug. 25-Sep. 15	Oct. 5	30,40
Western						
Dark-Fired (23)	570	May 5-June 20	Aug. 10	Aug. 25-Sep. 15	Oct. 5	Henry , Weakley
Burley (31)	55,000	May 5-June 20	Aug. 5	Aug. 25-Sep. 15	Oct. 5	20,30,40,50,60
One-Sucker (35)	600	May 5-June 20	Aug. 10	Aug. 25-Sep. 15	Oct. 5	20,30,40
Wheat, Winter	340,000	Sep. 25-Nov.30	June 10	June 15-June 30	July 10	statewide
Vegetable Crops:						
Fresh Market						
Tomatoes	3,600	Apr. 20-May 25	June 25	July 1-Aug. 31	Oct. 15	10,50,60
Snap Beans	8,000	May 1-July 31	June 25	July 1-Sep. 30	Oct. 5	Cumberland Plateau
Fruit:						
Apples						
East			July 15	Aug. 20-Sep. 30	Oct. 20	50,60
Middle, West			July 1	Aug. 1-Sep. 15	Oct. 5	10,20,30,40
Peaches			June 15	July 1-Aug. 10	Aug.	statewide

\* See State Map on back page of bulletin.